

IFW



PATENT APPLICATION

Docket No. 13316/3293
(Formerly 2777/3293)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of HASKELL Barin Geoffry *et al.*

Application No.: 10/812,062

Filed: March 30, 2004

Group Art Unit: 2631

Examiner: To Be
Assigned

For IMPROVED TARGET BITRATE ESTIMATOR,
PICTURE ACTIVITY AND BUFFER MANAGE-
MENT IN RATE CONTROL FOR VIDEO CODER

Customer No.: 23838

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. PTO/SB/08, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d)

before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

An English-language Abstract of non-English language reference 87 is attached hereto.

In references 136 and 156, the cited chapters of *Digital Multimedia Standards* and *Multimedia Systems, Standards, and Networks* are considered relevant. In order that the Examiner may note all chapters of these books, copies of the tables of contents are also enclosed. If the Examiner desires copies of any of the other chapters of these books, it is requested that he/she contact the undersigned.

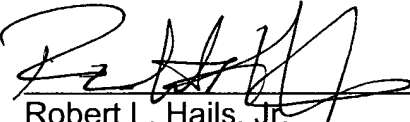
In accordance with U.S. practice, copies of the U.S. references are not included. Copies of the following references are attached:

87-100	118	133	139	145	155
105	120	134	140	147	156.
108	125-127	136	142	148	
115	130	137	143	150	

Respectfully submitted,

KENYON & KENYON

Date: July 8, 2005


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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 10

Complete if Known

Application Number	10/812,062
Filing Date	03/30/2004
First Named Inventor	HASKELL, Barin Geoffry
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3293

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	1	US- 2,905,756	09/22/1959	Graham	
	2	US- 4,245,248	01/13/1981	Netravali <i>et al.</i>	
	3	US- 4,394,680	07/19/1983	Watanabe	
	4	US- 4,717,956	01/05/1988	Moorhead <i>et al.</i>	
	5	US- 4,920,414	04/24/1990	Remus <i>et al.</i>	
	6	US- 4,958,226	09/18/1990	Haskell <i>et al.</i>	
	7	US- 4,999,705	03/12/1991	Puri	
	8	US- 5,001,559	03/1991	Gonzales <i>et al.</i>	
	9	US- 5,086,346	02/04/1992	Fujisawa	
	10	US- 5,116,287	05/26/1992	Hironaka <i>et al.</i>	
	11	US- 5,117,283	05/26/1992	Kroos <i>et al.</i>	
	12	US- 5,134,476	07/28/1992	Aravind <i>et al.</i>	
	13	US- 5,136,659	08/04/1992	Kaneko <i>et al.</i>	
	14	US- 5,170,264	12/08/1992	Saito <i>et al.</i>	
	15	US- 5,189,526	02/23/1993	Sasson	
	16	US- 5,194,941	03/16/1993	Grimaldi <i>et al.</i>	
	17	US- 5,196,933	03/1993	Henot	
	18	US- 5,214,507	05/25/1993	Aravind <i>et al.</i>	
	18	US- 5,214,721	05/25/1993	Fukuhara <i>et al.</i>	
	20	US- 5,227,878	07/13/1993	Puri <i>et al.</i>	
	21	US- 5,247,590	09/21/1993	Fukuhara <i>et al.</i>	
	22	US- 5,253,055	10/12/1993	Civanlar <i>et al.</i>	
	23	US- 5,253,056	10/12/1993	Puri <i>et al.</i>	
	24	US- 5,270,813	12/14/1993	Puri <i>et al.</i>	
	25	US- 5,278,646	06/11/1994	Civanlar	
	26	US- 5,345,317	09/06/1994	Katsuno <i>et al.</i>	
	27	US- 5,408,328	04/18/1995	Boliek <i>et al.</i>	
	28	US- 5,414,469	03/09/1995	Gonzales <i>et al.</i>	
	29	US- 5,436,985	07/25/1995	Li	
	30	US- 5,454,051	09/26/1995	Smith	
	31	US- 5,465,119	11/07/1995	Demos	
	32	US- 5,467,136	11/14/1995	Odaka <i>et al.</i>	

Examiner
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Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 10

Complete if Known

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First Named Inventor	HASKELL, Barin Geoffry
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3293

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	33	US- 5,473,376	12/05/1995	Auyeung	
	34	US- 5,488,418	01/30/1996	Mishima <i>et al.</i>	
	35	US- 5,493,513	02/20/1996	Keith <i>et al.</i>	
	36	US- 5,500,678	03/19/1996	Puri	
	37	US- 5,524,024	06/04/1996	Lin	
	38	US- 5,532,747	07/02/1996	Yoon <i>et al.</i>	
	39	US- 5,539,468	07/23/1996	Suzuki <i>et al.</i>	
	40	US- 5,561,477	10/01/1996	Polit	
	41	US- 5,566,002	10/15/1996	Shikakura	
	42	US- 5,592,569	01/07/1997	Li	
	43	US- 5,600,375	4/1997	Wickstrom	
	44	US- 5,619,591	04/08/1997	Tsang <i>et al.</i>	
	45	US- 5,659,490	08/19/1997	Imamura	
	46	US- 5,633,684	05/27/1997	Teranishi <i>et al.</i>	
	47	US- 5,699,117	12/16/1997	Uramoto <i>et al.</i>	
	48	US- 5,737,022	04/07/1998	Yamaguchi <i>et al.</i>	
	49	US- 5,748,789	05/05/1998	Lee <i>et al.</i>	
	50	US- 5,757,969	05/26/1998	Kim	
	51	US- 5,757,971	05/26/1998	Kim	
	52	US- 5,764,374	06/09/1998	Seroussi <i>et al.</i>	
	53	US- 5,764,805	06/09/1998	Martuci <i>et al.</i>	
	54	US- 5,778,097	07/07/1998	Nickerson	
	55	US- 5,781,665	07/19/1998	Cullen <i>et al.</i>	
	56	US- 5,786,855	07/28/1998	Chen <i>et al.</i>	
	57	US- 5,790,695	08/16/1998	Suwa	
	58	US- 5,812,197	09/22/1998	Chan <i>et al.</i>	
	59	US- 5,818,532	10/06/1998	Malladi <i>et al.</i>	
	60	US- 5,832,115	11/16/1998	Rosenberg	

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 3 of 10

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Application Number	10/812,062
Filing Date	03/30/2004
First Named Inventor	HASKELL, Barin Geoffry
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3293

U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
	61	US- 5,835,149	11/10/1998	Astle	
	62	US- 5,850,294	12/18/1998	Aposolopoulos <i>et al.</i>	
	63	US- 5,852,473	12/22/1998	Horne <i>et al.</i>	
	64	US- 5,852,682	12/22/1998	Kim	
	65	US- 5,859,921	01/12/1999	Suzuki	
	66	US- 5,881,180	03/09/1999	Chang <i>et al.</i>	
	67	US- 5,883,981	03/16/1999	Li <i>et al.</i>	
	68	US- 5,912,991	06/15/1999	Jeon <i>et al.</i>	
	69	US- 5,963,257	10/05/1999	Katata <i>et al.</i>	
	70	US- 5,966,468	10/12/1999	Fujimoto	
	71	US- 5,974,172	10/26/1999	Chen	
	72	US- 5,974,184	10/26/1999	Eifrig <i>et al.</i>	
	73	US- 5,978,509	11/02/1999	Nachtergaele <i>et al.</i>	
	74	US- 5,978,510	11/02/1999	Chung <i>et al.</i>	
	75	US- 5,999,189	12/07/1999	Kajiya <i>et al.</i>	
	76	US- 5,999,219	12/07/1999	Boon	
	77	US- 6,005,980	12/21/1999	Eifrig <i>et al.</i>	
	78	US- 6,026,183	02/15/2000	Talluri <i>et al.</i>	
	79	US- 6,055,623	12/21/1999	Takahashi <i>et al.</i>	
	80	US- 6,057,884	05/02/2000	Chen <i>et al.</i>	
	81	US- 6,097,842	08/01/2000	Suzuki <i>et al.</i>	
	82	US- 6,141,442	10/31/2000	Chen	
	83	US- 6,148,026	11/14/2000	Puri <i>et al.</i>	
	84	US- 6,208,693	03/27/2001	Chen <i>et al.</i>	
	85	US- 6,233,356	05/15/2001	Haskell <i>et al.</i>	
	86	US- 6,459,732	10/01/2002	Chen <i>et al.</i>	

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Sheet 4 of 10

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ² - Number ⁴ - Kind Code ⁵ (if known)				
	87	EP 0 283 715 A2	09/28/1988	ANT Nachrichtentechnik GmbH		Abs.
	88	EP 0 400 756 A2	12/05/1990	N.V. Philips' Gloeilampenfabrieken Groenewoudseweg		
	89	EP 0 422 404 A2	04/17/1991	International Business Machines Corporation		
	90	EP 0 514 663 A2	11/25/1992	International Business Machines Corporation		
	91	EP 0 517 256 A2	12/09/1992	Sony Corporation		
	92	EP 0 534 350	03/31/1993	Matsushita Electric Industrial Co., Ltd (JP)		
	93	EP 0 540 961 A2	05/12/1993	International Business Machines Corporation		
	94	EP 0 566 219 A2	10/20/1993	Canon Kabushiki Kaisha		
	95	EP 0 582 819 A2	02/16/1994	Sony Corporation		
	96	WO 94/27252 A	11/24/1994	Competitive Technologies, Inc.		
	97	EP 0 746 159 A2	12/12/1996	Matsushita Electric Industrial Co., Ltd.		
	98	EP 0 753 970 A2	01/15/1997	Sharp Kabushiki Kaisha		
	99	CA 2,168,641	03/28/2000	Kabushiki Kaisha Toshiba, JP		

Examiner Signature		Date Considered	
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**INFORMATION DISCLOSURE
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Sheet 5 of 10

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Filing Date	03/30/2004
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	100	CHEN, T., MPEG4 Video Verification Model VM 5.0, pages 2-192
	101	FUKINUKI, T.; "Measurement of Movement and Velocity of Moving Objects with Picture Signals"; IE78-67; pages 35-41; Central Research Laboratory; Hitachi, Ltd.; Kokubunji, Tokyo, Japan, 185; and English translation
	102	KOGA, T. <i>et al.</i> ; "Motion-Compensated Interframe Coding for Video Conferencing"; IE81-54; pages 85-90, C&C Systems Research Laboratories; Nippon Electric Co., Ltd; and English translation
	103	NONOMIYA, Y.; "Motion Correction for Interframe Coding Systems," IE78-6; pages 1-10; General Technology Research Institute; Nippon Broadcasting Association; and English translation
	104	Web site material, "MPEG-4: A Flexible Coding Standard for the Emerging Mobile Multimedia Applications," http://www.tnt.uni-hannover.de/project/eu/momusys/docs/Paper/IST/pimrc/pimrc.html
	105	COHEN <i>et al.</i> , "Adaptive Differential Coding of Picture Signals Based on Local Contour Prediction," Communications and Knowledge, Partners in Progress, November 29, 30 - December 1, 1976, Dallas, Texas
	106	PLOYSONGSANG, A. <i>et al.</i> , "DCT/DPCM Processing of NTSC Composite Video Signal," IEEE Transactions On Communications, vol. COM-30, no. 3, pp. 541-549, XP002062314, ISSN: 0090-6778, 1 March 1982 (1982-03-01)
	107	CHAM <i>et al.</i> , "DC Coefficient Restoration in Transform Image Coding," <i>IEE Proceedings</i> , Vol. 131, Pt. F, No. 7, pages 709 - 713, December 1984
	108	SEE <i>et al.</i> , "Efficient Encoding of DC Coefficients in Transform Coding of Images Using JPEG Scheme," <i>Signal Image and Video Processing</i> , Vol. 1, No. Symp. 24, published 11/06/1991, Institute of Electrical and Electronics Engineers, June 11-14, 1991, pages 404-407, Singapore
	109	KIM, J. W. <i>et al.</i> , "A Transform Domain Classified Vector Quantizer for Image Coding," IEEE Transactions on Circuit and Systems for Video Technology, pp. 3-14, XP002115624, March 1992 (1992-03)
	110	PURI, A., "Invited address: Video Coding Using the MPEG-1 Compression Standard," AT&T Bell Labs, Holmdel, NJ, 1992 SID Int'l. Symposium Digest of Technical Papers, Society for Information Display, Playa del Rey, CA, May 1992
	111	DE NATALE, F. G. B. <i>et al.</i> ; "Adaptive DCT For Image-Data Compression," European Transactions on Telecommunications and Related Technologies, vol. 3, no. 4, pp. 359-366, XP000310681, ISSN: 1120-3862, 1 July 1992 (1992-07-01)

Examiner
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Sheet 6 of 10

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	112	KOK, C. W. <i>et al.</i> : "Image Coding Using DCT of Wavelet Coefficients," Proceedings of the IEEE-SP International Symposium Time-Frequency and Time-Scale Analysis (CT. No. 92TH0478-8), pp. 475-478, XP002115625 1992, NY, NY, IEEE, USA ISBN: 0-7803-0805, Victoria, BC, Canada, 4-6 Oct. 1992
	113	TEST MODEL EDITING COMMITTEE, TELECOMMUNICATION STANDARDIZATION SECTOR, STUDY GROUP 15, EXPERTS GROUP FOR ATM VIDEO CODING (RAPPORTEUR'S GROUP ON PART OF Q.2/15), INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO-IEC/JTC1/SC29/WG11 MPEG93/457, "Test Model 5," Draft, Document AVC-491, Version 1, Coded Representation of Picture and Audio Information, April 1993
	114	PURI, A., "Video Coding Using the MPEG Compression Standard," AT&T Bell Labs, Holmdel, NJ, Visual Communications and Image Processing '93, Haskell <i>et al.</i> Chairs/Editors, Cambridge, MA, pages 1701-1713, Vol. 2094, Part Three, SPIE - The Int'l. Society for Optical Engineering, Bellingham, WA, November 8-11, 1993
	115	INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11, N0702 (revised); Incorporating N0702 (revised), incorporating N702 Delta of 24 March and Further Editorial Corrections; "Information Technology — Generic Coding of Moving Pictures and Associated Audio Information: Video, Recommendation H.262"; ISO/IEC 13818-2; May 10, 1994
	116	SCHMIDT <i>et al.</i> , "Performance Evaluation of Non-scalable MPEG-2 Video Coding," AT&T Bell Laboratories, Holmdel, New Jersey, Visual Communications and Image Processing '94, Katsaggelos, Aggelos K., Chair/Editor, Chicago, Illinois, Pages 296-310, Vol 2308, Part One, SPIE — The International Society for Optical Engineering, Bellingham, Washington, September 25-29, 1994
	117	INTERNATIONAL ORGANISATION FOR STANDARDISATION; Generic Coding of Moving Picture and Associated Audio Information; Video; ISO/IEC JTC1/SC29/WG11 NXXXX; ISO/IEC 13818-2, November 1994
	118	AIZAWA & HUANG, "Model-Based Image Coding: Advanced Video Coding techniques for Very Low Bit-Rate Applications," <i>Proceedings of the IEEE</i> , February 1995, vol. 83, no. 2, pp. 259-271
	119	AOE SUB GROUP; ORGANISATION INTERNATIONALE DE NORMALISATION; "MPEG-4 Proposal Package Description (PPD) - Revision 2 (Lausanne Revision)"; Source: ISO/IEC JTC1/SC29/WG11 N0937, MPEG 95/ Coding of Moving Pictures and Associated Audio Information; March 1995
	120	HARTMAN <i>et al.</i> , <i>The VRML 2.0 Handbook Building Moving Worlds on the Web</i> , pages 45-46, 264-265, Silicon Graphics, Inc. Addison-Wesley Publishing Co., 1996

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Sheet 7 of 10

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Application Number	10/812,062
Filing Date	03/30/2004
First Named Inventor	HASKELL, Barin Geoffry
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3293

NON PATENT LITERATURE DOCUMENTS

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	121	PURI, Atul, "Status and Direction of the MPEG-4 Standard," AT&T Bell Labs, Holmdel, NJ, Multimedia Communications and Video Coding, Wang <i>et al.</i> , Editors, pages 349-356, Plenum Press, New York, 1996
	122	CHIARIGLIONE, Leonard, Florence Press Release, Source: "MPEG Press Release," Int'l Organisation for Standardization, Coding of Motion Pictures and Audio, ISO/IEC JTC1/SC29/WG11N 1249, pp. 1-3, Firenze (Florence), Exhibit B, March 1996
	123	PURI <i>et al.</i> , "Initial B-Picture Syntax Proposal for MPEG-4 Video," Int'l Organisation for Standardization, Coding of Moving Pictures and Associated Audio, ISO/IEC JTC1/WG11/MPEG 96/ 0776, Florence, March 1996
	124	PURI <i>et al.</i> , "SBASIC Video Coding and Its 3D-DCT Extension for MPEG-4 Multimedia," AT&T Bell Labs, Holmdel, NJ, Visual Communications and Image Processing '96, Ansari <i>et al.</i> , Chairs/Editors, Orlando, FL, pages 1331-1341, Vol. 2727, Part Three, SPIE - The Int'l. Society for Optical Engineering, Bellingham, WA, March 17-20, 1996
	125	RIJKSE, Karel, Contact Person, Int'l. Telecommunication Union, ITU-T Draft H.263, Telecommunication, Standardization Sector of ITU, Line Transmission of Non-Telephone Signals, "Video Coding for Low Bitrate Communication," Draft ITU-T Recommendation H.263, http://www.image.cityu.edu.hk/~stwkchan/h263/h263.html , pp. 1-49, May 2, 1996
	126	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING, "MPEG-4 Video Verification Model Version 2.1, Source: Video Group, International Organization for Standardization; Coding of Moving Pictures and Associated Audio Information ISO/IEC JTC1/29/WG11 XXXX, pp. 1-69, May 3, 1996
	127	SCHMIDT, R. L., PURI, A. and HASKELL, B. G. (AT&T); INTERNATIONAL ORGANISATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11, MPEG96/1084; Coding of Moving Pictures and Associated Audio, "Results of Scalability Experiments"; Tampere, Finland, July 1996
	128	TAN, T. K. and SHEN, S. M., "Intra Prediction (T9/T10) and DC/AC Prediction Results"; INTERNATIONAL ORGANISATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11, MPEG 96/0939; Source: Panasonic Singapore Laboratories Pte Ltd (Matsushita); Coding of Moving Pictures and Associated Audio Information; July 1996
	129	SULLIVAN, Gary J., Contact, "Altered Sections of H.263 for Draft Text of H.263+"; ITU - Telecommunications Standardization Sector Document: ITU-LBC-96-358R1, STUDY GROUP 15, LBC Experts Group, Shepperton, UK, July 15-18, 1996

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Application Number	10/812,062
Filing Date	03/30/2004
First Named Inventor	HASKELL, Barin Geoffry
Art Unit	2631
Examiner Name	to be assigned
Attorney Docket Number	13316/3293

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	130	"The Virtual Reality Modeling Language Specification," Version 2.0, ISO-IEC CD 14772, August 4, 1996
	131	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING, "MPEG-4 VIDEO VERIFICATION MODEL VERSION 3.2," INTERNATIONAL ORGANISATION FOR STANDARDISATION, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Associated Audio Information, Chicago, September 1996
	132	PURI, A., SCHMIDT, R. L. and HASKELL, B. G. (AT&T); INTERNATIONAL ORGANISATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11 MPEG96/1320; Coding of Moving Pictures and Associated Audio; "Description and Results of Coding Efficiency Experiment T9 (part 4) in MPEG-4 Video"; Sept. 1996, Chicago
	133	CHEN <i>et al.</i> , IEEE International Conference on Image Processing, "An Approach to Region Coding for Content-Based Scalable Video," September 16, 1996, vol. 3, pp. 399-402
	134	EBRAHIMI, T., OSTERMANN, J., O'CONNELL, K., JANG, E.S. and the Ad hoc Group on Video Working Draft Editing; INTERNATIONAL ORGANIZATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11 N1470, MPEG96/ Maceio, "Working Draft 1.0 of ISO/IEC 14496-2," A. Puri (Editor), Coding of Moving Pictures and Audio, Nov. 1996
	135	AD HOC GROUP ON MPEG-4 VIDEO VM EDITING; INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG11, MPEG 96/ XXXX, Coding of Moving Pictures and Associated Audio Information, "MPEG-4 Video Verification Model Version 5.1"; Dec. 1996
	136	HASKELL, Barry G., PURI, Atul and NETRAVALI, Arun N., "Digital Video: An Introduction To MPEG-2," <i>Digital Multimedia Standards</i> ; Chapters 7-9, pp. 146-229, 1997
	137	HASKELL, Barry G., PURI, Atul and NETRAVALI, Arun N., "Digital Video: An Introduction To MPEG-2," <i>Digital Multimedia Standards</i> ; Chapter 17, "MPEG-4 and the Future," 1997
	138	Web site material, "MPEG-4 Video and Its Potential for Future Multimedia Services," http://wwwam.hhi.de/mpeg-video/papers/sikora/iscas.htm (1/27/97)
	139	CHEN <i>et al.</i> , IEEE Transactions on Circuits and Systems for Video Technology, "Coding of Subregions for Content-Based Scalable Video," vol. 7, No. 1, pp. 256-260, February 1997

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Attorney Docket Number	13316/3293

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	140	TEKALP & VAN BEEK, "CORE EXPERIMENT M2: Triangular Mesh-Based Coding with Object-Based Functionalities," International Organization for Standardisation - University of Rochester, ISO/IEC JTC1/SC29/WG11 MPEG96/1627, pages 1-18, February 1997
	141	PURI <i>et al.</i> , "Improvements in DCT Based Video Coding," AT&T Laboratories, Visual Communications and Image Processing '97, San Jose, California, SPIE - The International Society for Optical Engineering, Bellingham, Washington, February, 1997
	142	EBRAHIMI, T., HORNE, C., OSTERMANN, J., JANG, E.S., and the Ad hoc Groups on Video & SNHC VM/WD Editing; Source: Video & SNHC Groups; INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION, ISO/IEC JTC1/SC29/ WG11 N1797, MPEG97/, "Working Draft 4.0 of ISO/IEC 14496-2"; A. Puri (Editor); Stockholm, July 1997
	143	ELEFTHERIADIS <i>et al.</i> , editors, "Text for CD 14496-1 Systems," Int'l. Organization for Standardisation, Coding of Moving Pictures and Audio, ISO/IEC JTC1/SC29/ WG11, N1901, pp. i-207, November 21, 1997
	144	PURI <i>et al.</i> , "Current and Future Trends in Multimedia Standards," Multimedia Technology for Applications, Sheu <i>et al.</i> , Editors, Chapter 1, pages 3-35, IEEE Press Marketing, Piscataway, NJ, 1998
	145	PURI, A. and ELEFTHERIADIS, A., "MPEG-4: An Object-Based Multimedia Coding Standard Supporting Mobile Applications" invited paper in <i>Mobile Networks and Applications</i> , 3, pp. 5-32, 1998
	146	Web site material, "The Structure of the MPEG-4 Video Coding Algorithm," http://www.ee.iisc.ernet.in/people/students/gupta/Mpeg4/Coding/fmpeg4vm.htm (3/1/98)
	147	INT'L. ORGANIZATION FOR STANDARDISATION, CODING OF MOVING PICTURES AND AUDIO, ISO/IEC JTC1/SC29/ WG11, N2403, "MPEG-4 Standard Completed," 6 pages, October 12-16, 1998
	148	FDIS/BIFS, Technical Paper, Chapter 9, Sections 9.1 through 9.4.2.100.2, 16:37, November 23, 1998
	149	MPEG-4 Systems, "Coding of Audio-Visual Objects: Systems," ISO/IEC JTC 1/SC 29/WG 11, N2501, ISO/IEC 14496-1:1999(E), December 18, 1998

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	150	PURI <i>et al.</i> , "Scene Description, Composition, and Playback Systems for MPEG-4," SPIE, <i>Visual Communications and Image Processing '99</i> , San Jose, California, pp. 2-13, January 25-27, 1999
	151	PURI, A. and TEKALP, A. M., "MPEG-4 and MPEG-7 Standards," Electronic Imaging, Course Notes, San Jose, January 1999
	152	MPEG-4 SYSTEMS GROUP, N2739, "Text for ISO/IEC 14496-1/PDAM1," ISO/IEC JTC1/SC29/WG11, March 1999
	153	MPEG-4 SYSTEMS GROUP, N2741, "MPEG-4 Systems Version 2 Verification Model 6.0," ISO IEC JTC1/SC29/WG11, March 1999
	154	Web site material, "Object-Based Coding," http://www.ece.concordia.ca/~ysorial/seminar_1/node18.html (7/14/99)
	155	LIFSHITZ, Z., DICAGNO, G., FRANCESCHINI, G. and BATTISTA, S., "MPEG-4 Players Implementation," <i>Multimedia Systems, Standards, and Networks</i> , Puri, A. and Chen, T., Editors, Chapter 16, pp. 461-486, Marcel Dekker, Inc., New York, New York, 2000
	156	PURI, A. and CHEN, T., editors, <i>Multimedia Systems, Standards, and Networks</i> , Chapters 3-5, 7-9, 12 and 13; Marcel Dekker, Inc., New York, New York, 2000
	157	INT'L. ORGANISATION FOR STANDARDISATION; CODING OF MOTION PICTURES AND AUDIO, ISO/IEC 14496-2: 1999/Amd. 1:2000(E); ISO/IEC JTC1/SC29/WG11; SC 29 Secretariat: JISC; "Information Technology - Coding of Audio-Visual Objects - Part 2: Visual, Amendment 1: Visual Extensions; Exhibit D; January 31, 2000

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